CLAIMS:

1. A method for virtual orthodontic treatment, comprising:

(a) providing a first virtual three-dimensional image indicative of a three-dimensional (3D) model of teeth from at least one jaw, the model being manipulable so as to allow its viewing from a desired direction;

(b) selecting a virtual set of orthodontic components, and associating the components with the teeth of said first image so as to obtain a second image of said 3D model with said components associated therewith;

(c) using a set of rules, including at least one rule, defining the effect of said set of components on said teeth, computing the manner of movement of the teeth as a result of said effect, so as to obtain a third image comprising the teeth model following the virtual treatment.

2. A method according to Claim 1, wherein steps (b) and (c) are repeated a plurality of times until obtaining a desired result of the virtual treatment.

3. A method for designing an orthodontic treatment of teeth from at least one jaw, comprising:

(a) providing a virtual three-dimensional image indicative of a three-dimensional model of the teeth in a manner allowing manipulation of the model for viewing the model from a desired direction;

(b) selecting a virtual set of orthodontic components corresponding to those intended to be used in said orthodontic treatment and associating the components with the teeth of said first image so as to obtain a second image of said three-dimensional model with said components associated therewith in a manner representing the manner in which said components and the teeth may be combined in said orthodontic treatment;

(c) using a set of rules, including at least one rule, defining the manner in which said components affect movement of the teeth, so as to obtain a third image comprising the teeth model after movement of the teeth affected by said components;

(d) repeating steps (a) and (c) until a desired third image is obtained, which desired third image represents a desired position and orientation of teeth following the orthodontic treatment;

(e) recording said second image which yields, following step (c), the desired third image and using it as a basis for designing the orthodontic treatment.

4. A system for a virtual orthodontic treatment, comprising:

(a) storage means capable of storing a first virtual three-dimensional image indicative of a three-dimensional model of teeth of at least one, substantially entire jaw;

(b) user interface for enabling selection of a virtual set of orthodontic components;

(c) processor capable of at least:

(c1) manipulating said three-dimensional model to allow its viewing from a desired direction,

(c2) associating said set with the teeth of said first image to obtain a third image of said three-dimensional model with said components associated therewith, and

(c3) applying a set of rules, including at least one rule, determining effect of said components on the teeth so as to cause virtual movement of the teeth as a result of association with said components to obtain a third teeth model; and

(d) display means for displaying the images.

5. An apparatus having a memory which contains a digital image representing a three-dimensional teeth model following a virtual orthodontic treatment, which image is generated by the method of Claim 1.

6. An apparatus having a memory which contains a digital image representing a three-dimensional teeth model following a virtual orthodontic treatment, which image is generated by the method of Claim 3.

7. A memory for storing data for access by an application program implementing the steps (b)-(c) according to Claim 1; the application program

being executed on a data processing system; the data representing a first three-dimensional image indicative of a three-dimensional (3D) model of teeth from at least one jaw.

8. A memory for storing data for access by an application program implementing the steps (b)-(c) according to Claim 3; the application program being executed on a data processing system; the data representing a first three-dimensional image indicative of a three-dimensional (3D) model of teeth from at least one jaw.